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Amdt. dated 05/09/2005
Reply to OA mailed 02/08/2005

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REMARKS

This Amendment is responsive to the Office Action identified above, and is further responsive in any other manner indicated below.

REPLACEMENT TITLE

The title has been objected to because of the Office Action concerns listed within the page 2, section numbered "2" of the Office Action, *i.e.*, as not being sufficiently descriptive. As the foregoing replacement title is believed to be sufficiently descriptive of the invention to which the claims are directed, reconsideration and withdrawal of the objection to the title are respectfully requested. In the event that the present replacement title is itself found not to be sufficiently descriptive, the Examiner is herein authorized to amend to a suitable replacement title.

PENDING CLAIMS

Claims 1-46 were pending, under consideration and subject to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any prior art or scope adjustment and are simply refocused claims in which Applicant is presently interested. At entry of this paper, Claims 1-18 will be pending for further consideration and examination in the application.

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REJECTION UNDER §112, 2ND PAR. OBSOLETE VIA CLAIM CANCELLATION

Claims 22 and 29 have been rejected under 35 USC §112, second paragraph, as being indefinite for the concerns listed within the sections numbered "9-11" on page 3 of the Office Action. Unrelated to any prior art rejection, ALL such claims have now been canceled without prejudice or disclaimer, thus rendering the rejection thereof obsolete at this time. Based upon the foregoing, reconsideration and withdrawal of the §112, second paragraph, rejection are respectfully requested.

REJECTION UNDER 35 USC §103

All 35 USC §103 rejections are respectfully traversed. Such rejections have been rendered obsolete by the present clarifying amendments to Applicant's claims, and accordingly, traversal arguments are not appropriate at this time. However, Applicant respectfully submits the following to preclude renewal of any such rejections against Applicant's clarified claims.

All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated herein by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

Unrelated to any prior art rejection, Claims 19-46 have now been canceled without prejudice or disclaimer, thus rendering this rejection of such claims obsolete

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at this time. Patentability of remaining ones of the rejected claims is supported as follows.

In order to properly support a §103 obviousness-type rejection, the reference not only must suggest the claimed features, but also must contain the motivation for modifying the art to arrive at an approximation of the claimed features. However, the cited art does not adequately support a §103 obviousness-type rejection because it does not, at minimum, disclose (or suggest) the following limitations of Applicant's clarified claims.

More particularly, Applicant's disclosed and claimed invention is directed to improved digital signal recorder arrangements, for recording a digital signal on a recording medium. As an example, Applicant's invention provides improved protection for digital signals recorded on a recording medium by a digital signal recorder (e.g., VTR) from a digital broadcast or the like. In order to accomplish improved protection, Applicant's invention includes a "key information generation unit to generate at least one item of key information" (e.g., see FIG. 2's blocks 117 and 118). Applicant's key information generation unit is important in that new key information can be generated therein (at important times) to provide the enhanced protection.

As one example, assume that a program is distributed (e.g., broadcasted) without encryption, but with copy protection information (e.g., a digital watermark). If a user goes against the copy protection designation and attempts copying of a copy prohibited program, Applicant's key information generation unit can be used to generate key information which can be used to subsequently encrypt the program

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during recording. A thieving user will be given an initial impression of recording, but subsequently will find the recorded program encrypted leading to discouraging frustration to the thief.

As another example, Applicant's invention may be useful in varying encryption over time. More particularly, in a disadvantageous arrangement, an encryption key read together with a program's reproduction, is again recycled and used to encrypt the program if it is subsequently copied, *i.e.*, the same encryption key perpetuates through all copies. One problem with that is occasionally encryption keys are pirated (*e.g.*, reverse engineered), and if all copies of the program utilize the same key, it is easy for large numbers of program thieves to widely distribute the illegal copies/keys. With Applicant's invention, Applicant's key information generation unit can be used to generate new key information upon each copy, such that differing copies of the same program end up with differing keys. Such is advantageous in discouraging thieves as often it is cost/time prohibitive to reverse engineer an encryption key if that key will only work with a single copy.

Once Applicant's key information generation unit generates key information, Applicant's key generation unit receives the key information and then performs a prescribed arithmetic operation thereon to generate a key. An encryption circuit which receives the key and the original digital signal (*e.g.*, program), then encrypts the digital signal with the key, and outputs the resulting encrypted digital signal in a case where the digital signal needs copy protection. A recording circuit then records the key information together with the encrypted digital signal in a case where the digital signal needs copy protection, and records the digital signal without encryption

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In a case where the digital signal needs no copy protection. That is, Applicant's generated key information is recorded together with the copy so that subsequent key generation and thus reproduction can be performed.

Turning now to rebuttal of the applied art, such art is deficient in adequately supporting the §103 obviousness-type rejection in that all such art is mutually deficient in not disclosing any arrangement like Applicant's key information generation unit. More particularly, it appears that all such art teaches the above-mentioned disadvantageous arrangement where an encryption key is read together (e.g., down-loaded) with a program's reproduction, is again recycled and used to encrypt the program if it is subsequently copied, i.e., the same encryption key perpetuates through all copies. As mentioned previously, such arrangement is disadvantageous in allowing/facilitating wholesale/widespread theft of a program once the encryption key associated therewith is cracked.

In addition to the foregoing, the following additional remarks from Applicant's foreign representative are also submitted in support of traversal of the rejection and patentability of Applicant's claims.

As to Blatter, the program is always received in an encrypted condition and the encrypted program itself is recorded to a recording medium. Namely the information recorded to the recording medium is always in the encrypted condition, even if the received program needs no copy protection. Further, as the received program is encrypted and key information (encryption code) is embedded in the received program itself, there is no disclosure of key generation unit,

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As to Kullinets, it discloses just a transponder and there is no feature of the present invention.

As to Kim, as well as Kullinets, there is no feature of the present invention.

As a result of all of the foregoing, it is respectfully submitted that the applied art (taken alone and in the Office Action combinations) would not support a §103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such §103 rejection, and express written allowance of all of the §103 rejected claims, are respectfully requested.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer of any scope or subject matter. Further, Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, *i.e.*, Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

EXAMINER INVITED TO TELEPHONE

The Examiner is invited to telephone the undersigned at the local D.C. area number 703-312-6600, to discuss an Examiner's Amendment or other suggested

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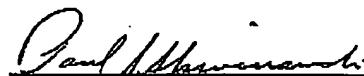
actions for accelerating prosecution and moving the present application to allowance.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

This Amendment is being filed within the shortened statutory period for response set by the 8 February 2005 Office Action (8 May 2005 being a Sunday), and therefore, no Petition or extension fee is required. To whatever other extent is actually necessary, Applicant respectfully petitions the Commissioner for an extension of time under 37 CFR §1.136. No additional claims fees are required for entry of this paper. Please charge any actual required fee to ATS&K Deposit Account No. 01-2135 (as Case No. 501.40474X00).

Respectfully submitted,



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